Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A signal processor, comprising:

a signal processing unit covered with a vacuum insulation layer in a vacuum vessel;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer;

a heater that heats to activate said getter material, and;

an electrification controller for supplying electric power to said cooling mechanism and to said heater and operative such that whenever power is supplied to said electrification controller after a power interruption condition, said electrification controller always first supplies power to said heater and thus switchingswitches said heater ON ~~said heater~~ in advance before supplying power to said cooling mechanism. ~~cooling begins.~~

2. (Original) The signal processor according to Claim 1, wherein said

signal processing unit comprises:

a band-pass filter for selecting a predetermined signal from a receiving signal input from an antenna terminal; and

a low noise amplifier for amplifying an output from said band-pass filter to a predetermined level with low noise.

3. (Original) The signal processor according to Claim 1, wherein said electrification controller comprises:

a relay that switches electrification either to said cooling mechanism or said heater; and

a sequencer that controls said relay.

4. (Currently Amended) The signal processor according to Claim 1, wherein;

at least ~~all or~~ a part of wirings of said signal processing comprises ~~unit makes up of~~ a superconductive material, and

said cooling mechanism has a capability of cooling ~~to cool~~ said signal processing unit so that ~~until~~ said superconductive material becomes superconducting~~in a superconductive state~~.

5. (Original) The signal processor according to Claim 4, wherein said superconductive material is a high-temperature superconductor having superconductive characteristics at a high temperature.

6. (Currently Amended) A signal processor, comprising:

a signal processing unit covered with a vacuum insulation layer in a vacuum vessel;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer;

a heater that heats to activate said getter material, and;

an electrification controller for supplying electric power to said cooling mechanism and said heater and operative, whenever power is started after a power interruption, to ~~that~~

selectively switch ~~switches~~ ON said heater ~~when~~ before switching ON said cooling mechanism ~~cooling begins~~ and thereafter, selectively ~~switches~~ switch ON said cooling mechanism only after a predetermined condition is established.

7. (Currently Amended) The signal processor according to Claim 6, wherein ~~"after said~~ said predetermined condition ~~is said established" equals "after~~ ~~equals "after~~ comprises a passage of a certain period of ~~time".~~time.

8. (Original) The signal processor according to Claim 6, wherein said signal processing unit comprises:

a band-pass filter for selecting a predetermined signal from a receiving signal input from an antenna terminal; and

a low noise amplifier for amplifying an output from said band-pass filter to a predetermined level with low noise.

9. (Original) The signal processor according to Claim 6, wherein said electrification controller comprises:

a relay that switches electrification either to said cooling mechanism or said heater;

and a sequencer that controls said relay.

10. (Currently Amended) The signal processor according to Claim 6, wherein;

at least ~~all or~~ a part of wirings of said signal processing comprises ~~unit makes up of~~ a superconductive material, and

said cooling mechanism has a capability to cool said signal processing unit ~~until~~ said superconductive material becomes in a superconductive state.

11. (Original) The signal processor according to Claim 10, wherein said superconductive material is a high-temperature superconductor having superconductive characteristics at a high temperature.

12. (Currently Amended) A cooling method of a signal processor that comprises:

establishing a vacuum insulation layer over a signal processing unit ~~covered with a vacuum insulation layer~~;

cooling said signal processing unit using a cooling mechanism ~~that cools said signal processing unit~~;

controlling the pressure of said vacuum insulation layer using a getter material of a heat-activation type ~~that controls increase of gas pressure inside said vacuum insulation layer~~; ~~and~~

heating said getter material using a heater to activate same; ~~a heater that heats to activate said getter material~~

supplying power to said a heater and said cooling mechanism;~~,~~ and wherein;

whenever electric power is supplied after power interruption, always first supplying power to said heater ~~is switched ON~~ in advance of supplying power to said cooling mechanism~~when cooling begins~~.

13. (Currently Amended) A cooling method of a signal processor that comprises:

establishing a vacuum insulation layer over a signal processing unit ~~covered with a vacuum insulation layer~~;

cooling said signal processing unit using a cooling mechanism ~~that cools said signal processing unit~~;

controlling the pressure of said vacuum insulation layer using a getter material of a heat-activation; ~~type that controls increase of gas pressure inside said vacuum insulation layer; and~~

heating said getter material using a heater to activate same; ~~a heater that heats to activate said getter material~~

supplying power to said a heater and said cooling mechanism;~~,~~ and wherein;

whenever electric power is supplied after power interruption, always first supplying power to said heater ~~is selectively switched ON when~~ before supplying power to said cooling mechanism~~cooling begins~~ and thereafter, selectively switching ON said cooling mechanism ~~is selectively switched ON~~ after a predetermined condition is established.

14. (Currently Amended) The cooling method of the signal processor according to Claim 13, wherein ~~"after said~~ said predetermined condition ~~is said established" equals "after equals "after~~ comprises a passage of a certain period of ~~time".~~time.

15. (Currently Amended) The cooling method of the signal processor according to Claim 13, ~~implementing a change over of~~ wherein selectively switching ON said cooling mechanism is performed using ~~switching cooling by using~~ a sequence program.

16. (Currently Amended) A radio receiver comprising:

a signal processing unit covered with a vacuum insulation layer;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer;

a heater that heats to activate said getter material; and

an electrification controller for supplying electric power to said cooling mechanism and to said heater and operative such that whenever power is supplied to said electrification controller after a power interruption condition, said electrification controller always first supplies power to said heater and thus switching said heater ON in advance before supplying power to said cooling mechanism~~that switches ON said heater in advance before cooling begins~~.

17. (Currently Amended) A radio receiver, comprising:

a signal processing unit covered with a vacuum insulation layer;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer;

a heater that heats to activate said getter material, and;

an electrification controller that, whenever power is reestablished after a power interruption, always first selectively switches ON said heater ~~when cooling begins~~ and thereafter selectively switches ON said cooling mechanism only after a predetermined condition is established.

18. (Currently Amended) A cooling method of a radio receiver that comprises:

establishing a vacuum insulation layer over a signal processing unit ~~covered with a vacuum insulation layer~~;

cooling said signal processing unit using a cooling mechanism ~~that cools said signal processing unit~~;

controlling the pressure of said vacuum insulation layer using a getter material of a heat-activation type ~~that controls increase of gas pressure inside said vacuum insulation layer~~; and

heating said getter material using a heater to activate same; ~~a heater that heats to activate said getter material,~~

supplying power to said a heater and said cooling mechanism; and wherein;

whenever electric power is supplied after power interruption, always first supplying power to said heater ~~is switched ON in advance~~ before supplying power to said cooling mechanism~~cooling begins~~.

19. (Currently Amended) A cooling method of a radio receiver that comprises:

establishing a vacuum insulation layer over a signal processing unit ~~covered with a vacuum insulation layer~~;

cooling said signal processing unit using a cooling mechanism ~~that cools said signal processing unit~~;

controlling the pressure of said vacuum insulation layer using a getter material of a heat-activation; ~~type that controls increase of gas pressure inside said vacuum insulation layer; and~~

heating said getter material using a heater to activate same; ~~a heater that heats to activate said getter material~~

supplying power to said a heater and said cooling mechanism;~~,~~ and wherein;

whenever electric power is supplied after power interruption, always first supplying power to said heater ~~is selectively switched ON when~~ before supplying power to said cooling mechanism~~cooling begins~~ and thereafter, selectively switching ON said cooling mechanism ~~is selectively switched ON~~ after a predetermined condition is established.